HTML (Part II): Making Links

*By Kevin Savetz**

Last month we started exploring the mysteries of the Hypertext Markup Language (HTML), the tool you can use to create your own World Wide Web pages. This month we'll take a look at creating *links* with HTML. From the user's perspective, a link is the "hot text"—the text that is underlined, colored, or both, depending on context. When clicked, the link presents new information. Links are the essence of hypertext,

This is the second of three articles on HTML. The final article will address issues of style and effective presentation. The author, Kevin Savetz, is taking time off from his Help Desk column to write the series. You can visit his personal home page at* ***http://www.northcoast.com/~savetz/savetz.html.*

and they are part of what makes the Web so easy to use. In this article you'll learn about links *between* Web pages and *within* a page; the latter are called *anchors*.

How To Link

To create a hypertext link, you use the "a" (or anchor) tag as follows:

```
Would you like<a href="moreinfo.html">
more information?</a><p>
```

This line presents the user with the sentence "Would you like more information?"; the words "more information?" will appear as clickable hot text. A user who selects the link will download a page called moreinfo.html, located in the same directory as the current page (no path is included as part of the file name). In the first part of the tag, the <a > tells the Web client that this is a link. Everything between that tag and the closing tag, , will appear as a clickable link. The <p> tag, you'll remember, forces a line break.

Style mavens consider it poor practice to create links that say "click here," preferring implicit, content-based links such as the one above.

You can use pictures instead of text as links. For instance, it is a common practice to include a small "thumbnail" image with a link to a larger version of the same image. That way, users with slow Internet connections don't have to wait for huge images to transfer unless they explicitly request them. Here's how to do it:

```
If you're in Peoria, please visit our
store. <a href="buildingbig.gif"><img
src="buildingsmall.gif"></a>
```

For the user this line of HTML code will display the text ("If you're in Peoria...") followed by a small picture. If a user clicks on the small picture, a larger version of the picture is downloaded. Although we've used a GIF image in this example, many Web browsers also let you point to other types of images—such as JPEGs and Windows bitmapped (BMP) files. Linking to these file types is fine, but I don't suggest using JPEGs or BMP files for inline images (covered last month), because many browsers don't handle them as gracefully as the tried-and-true GIF format.

Animation and Sound

You can use the same syntax to add links to animation and sound files. For example,

```
<a href="wagtail.mov">A happy dog</a>
```

links to a QuickTime movie. The only difference is the file extension of the linked file: .MPG for MPEG-format movies, .AU and .AIFF for sounds, and .PS for Postscript files. Make sure your intended audience has the necessary viewer or player. Most UNIX workstations cannot view QuickTime movies, although well-configured Macintosh and Windows computers can. Not everyone has a sound card and speakers today. It's a good idea to provide text equivalents of complex multimedia files out of consideration of the millions of people with less-than-Pentium-class computers. And it's good marketing to reach as many as possible as transparently as possible.

Linking to Files Elsewhere

In these examples, we've used links to point to HTML files and images located in the same directory on the same server as the current page. You can also point to files in other directories of the server using relative pathnames similar to those used in MS-DOS and UNIX. To link to a file in a directory *down one level* from the directory on which the current page is located, you precede the file name by the directory name, as follows:

```
<a href="pictures/puppy.gif">
```

Where the puppy.gif image is in the pictures directory. Or, you can point to a file that's up a directory using two periods (..), which means "go up one directory":

```
<a href="../puppy.gif">
```

The beauty of links is that you can point to just about anything on the Internet: *an image* (href="http://www.northcoast.com/images/building.gif"), *a file at an anonymous FTP site* (href="ftp://ftp.northcoast.com/pub/myfile.zip"), or even *an e-mail address*: (href="mailto:savetz@northcoast.com"). Notice that each of the URLs (uniform resource locators) is in quotes.

That last command, "mailto," is an easy way to let users send you electronic mail, if their browsers sup-

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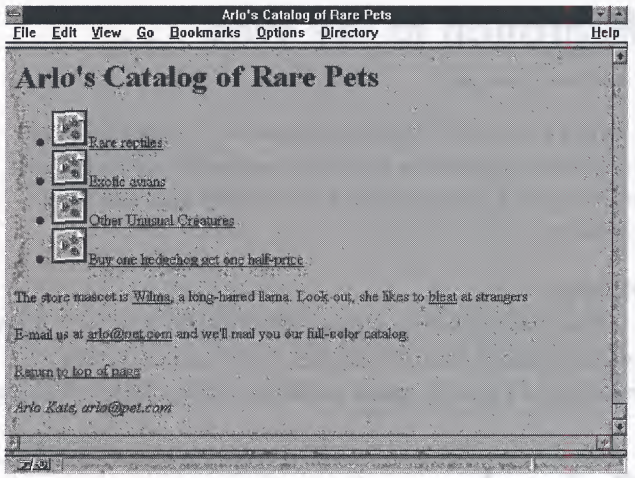
```
<title>Arlo's Catalog of Rare Pets</title>
<a NAME="top"</a>
<ul>
<li><a href="reptiles.html"><img src="icon.gif">Rare reptiles</a>
<li><a href="birds.html"><img src="icon.gif">Exotic avians</a>
<li><a href="others.html"><img src="icon.gif">Other Unusual
Creatures</a>
<li><a href="llama.html"><img src="icon.gif">Buy one hedgehog get
one
half-price</a>
</ul>
The store mascot is <a href="wilma.gif">Wilma</a>, a long-haired
llama.
Look out, she likes to <a href="bleat.au">bleat</a> at
strangers.<p>
E-mail us at <a href="mailto:arlo@pet.com">arlo@pet.com</a> and
we'll mail
you our full-color catalog.<p>
<a href="#top">Return to top of page</a><p>
<address>Arlo Kats, arlo@pet.com</address>
```

HTML source code for figure shown opposite


Arlo's Catalog of Rare Pets
File Edit View Go Bookmarks Options Directory Help
Arlo's Catalog of Rare Pets
Rare reptiles
Exotic avians
Other Unusual Creatures
Buy one hedgehog get one half-price
The store mascot is Wilma, a long-haired llama. Look out, she likes to bleat at strangers
E-mail us at arlo@pet.com and we'll mail you our full-color catalog
Return to top of page
Arlo Kats, arlo@pet.com

The result as displayed by Netscape, with inline graphics turned off

port that function, thus adding an interactive dimension to an otherwise passive information display. Note that mailto and the URL are separated only by a colon. Your page might include a line like:

```
Send us <a href="mailto:catalog@
mycompany.com">e-mail</a>to request
your free catalog!
```

Moving Around a Page

If you're presenting a large amount of information, you should impose a clear organization, use headers, and probably split the information into several, small HTML-linked pages. Sometimes, however, your information can be presented more clearly by keeping it all on one long page (if the information itself is self-contained, as in a long list of links, say). For those times, it is convenient to be able to jump around within a page. You can make this possible by marking a spot in your HTML page, then including an *anchor* to that mark.

You create an anchor using the NAME label within the <a> tag. For example:

```
<a NAME="petfood"></a>
```

Anywhere else in that HTML file, you can include the anchor Find out about our selection of pet food. When clicked, the reader jumps straight to the named anchor, *petfood*. You can also jump to a spot within a remote document:

```
<a href="http://peoria_store/
for_sale.html#petfood">Find out about
our selection of pet food</a>
```

In the next and last article in this series, we'll present style suggestions to help you adapt the content you want to publish on the Web to the constraints and possibilities of HTML.

Migration to the Web . . .

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which they can be downloaded by anyone in the world whose provider carries the group.

Now Net-happenings is available via a searchable World Wide Web page (**http://www.mid.net/NET/**) maintained by MIDnet (Lincoln, Neb.), a subsidiary of Global Internet (Palo Alto, Calif.) and one of the original regional access providers under the National Science Foundation (NSF).

By generating traffic at the mid.net domain, MIDnet is quietly publicizing its own services, of course. Among MIDnet's enhancements to this resource are archives, forms for submitting comments and new resources, and links to other Net-happenings gateways.

Another mailing list now available on the Web is INET-marketing, a high-volume mailing list begun in July 1994. This list, moderated by Glenn Fleischman, is devoted to all aspects of marketing over the Internet. Using a program called hypermail, the list is now also available on the World Wide Web at **http://www.einet.net/hypermail/INET-marketing/**. The current and past months' postings can be displayed by subject, thread, author, and date. The sponsor in this case is the Enterprise Integration Network (EIN), which is owned by MCC (Microelectronics and Computer Technology

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Corporation), a Texas-based research consortium of high-tech companies best known for its subject guide to Internet resources and its WinWeb and MacWeb browsers.

Hytelnet

Also making the transition to the Web is Hytelnet, a listing of Telnet-based library resources, Free-Nets, and other resources. Originally made available only by Telnet, Hytelnet now has a Web interface offering all the features and access capabilities of the Telnet site, with the speed and point-and-click convenience of the Web (**http://www.usask.ca/cgi-bin/hytelnet/**). For Web browsers that support Telnet, this site provides access to most of the world's Telnet resources.

Finally, the Web is beginning to generate the search tools that are further simplifying access to non-Web information. A sampling of search engines—from Veronica to Archie—is available at the Centre d'Universitaire Informatique (CUI) of the University of Geneva: **http://cuiwww.unige.ch/meta-index.html**.

Calendar

WebWorld '95. April 19 - 21. Santa Clara Convention Center, Santa Clara, Calif. Organized by Digital Consulting Inc. Information: SEMINAR@dci-inc.com, **http://199.232.60.132/DCI/**, or call 508-470-3880.

The 21st Century Marketplace: Doing Business on the Internet. Ann Arbor, Mich. April 20. Information: call CICNet at 800-947-4754 or send e-mail to training@cic.net. Seminar presented by Peter Deutsch.

Law of Electronic Commerce: Online Seminar. Starting May 9. Information: call 800-466-4595 or 717-258-1816, or send e-mail to bwrigh01@reach.com. Seminar is conducted by attorney Benjamin Wright, sponsored by First Virtual, organized by the National Computer Security Association, and covers EDI, electronic signatures, e-mail privacy, and legality of electronic contracts.

INET 95—The Internet: Toward Global Information Infrastructure. Internet Society's 5th annual convention. June 26-30. Honolulu, Hawaii. Information: send e-mail to inet95@isoc.org.

First Annual Conference on Telecommunications and Information Markets (COTIM-1995). Nov. 5-8. Newport, R.I. Information: send e-mail to Dr. Ruby Roy Dholokia at ruby@uriacc.uri.edu or David Fortin at dfor8320@uriacc.uri.edu, or call the Research Institute for Telecommunications and Information Marketing, University of Rhode Island, at 401-792-5065.

Internet Expo. Nov. 28-30. Boston, Mass. Sponsored by DCI. Information: call 508-470-3880, fax 508-470-0526, send e-mail to dciconfl@aol.com, or go to **http://www.oec.com/DCI/**.

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